

I CLAIM:

1. A method of welding an end of an elongate structural I-beam to a beam-attaching facial side in an initially separate, generally planar, beam-attaching end component whose beam-attaching facial side is intended, with the I-beam and end  
5 component joined to one another in a manner whereby the end component spans the entire end footprint of the beam, said method comprising

preparing the subject beam end by assuring that the two flanges in the beam terminate at the associated end of the beam with generally overall planar expanses which lie in a substantially common plane which is disposed generally normal to the beam's  
10 long axis,

preparing the end component's beam-attaching facial side with a pair spaced, elongate troughs which are arranged so as substantially directly to confront the flanges' mentioned planar expanses under circumstances with the beam and component brought into appropriate relative positions preparatory for joinder, and

15 with those relative positions established, producing weld connections which substantially fill the troughs with weld material, thereby to establish weld joinder between the beam and component.

2. The method of claim 1, wherein the prepared troughs are created with lengths which cause opposite end regions of each trough, with the relative positions mentioned between the beam end and component established, to extend laterally beyond opposite lateral edges of the flanges which confront the trough, which regions form weld run-on and run-off zones, and said producing of weld connections includes weld-material filling and utilizing of such zones.

3. The method of claim 2, wherein the formation of the run-on and run-off zones in each trough is performed in such a manner that the ends of each are defined, at least partially, by pairs of elongate opposing spaced walls which are spaced along a line that is disposed generally normal to the plane of the end component.

4. A weld-connective interface between an end of an elongate structural I-beam having spaced flanges and an interposed central web, and a beam-attaching facial side of a generally planar beam-attaching end component, which facial side is sized to span the entire end footprint of the beam, and where the subject beam end is at least partially defined by substantially overall co-planar, elongate flanges having ends that lie in a plane which is substantially normal to the beam's long axis, said interface comprising

a pair of spaced, elongate troughs formed in said end component, which troughs directly confront said flanges' said ends, and

weld material substantially filling said troughs and structurally uniting and joining said beam and said end component.

5. The interface of claim 4, wherein each of said flanges has spaced opposite edges with a defined lateral dimension between said edges, and the associated confronting trough has spaced end regions which extend laterally beyond said edges.

6. The interface of claim 5, wherein each said end region is defined, at least partially, by a pair of elongate, spaced and opposing walls which are spaced along a line that is disposed generally normal to the plane of said end component.